

04/18/2014 Faculty-to-Faculty Conference – INTRODUCTION TO STATISTICS

Breakout Group

Chairs: Chip Nava, PCC; Nels Grevstad, MSU Denver

Scribe: Andy Keck, WSCU

CIC = calculate, interpret and communicate

PIC = perform, interpret and communicate

Descriptive stats

The student will compute and interpret measures of center and spread and construct and analyze graphical displays to summarize data

Probability

The student will utilize basic concepts of probability including independence and conditional probability to calculate, interpret and communicate event probabilities.

Discrete and continuous probability distributions

The student will determine the appropriate probability distribution based on experiment conditions and assumptions (including the uniform, normal, and binomial distributions) to calculate, interpret and communicate probabilities.

Correlation and Regression

The student will calculate, interpret and communicate the correlation coefficient and simple linear regression equation.

Sampling distributions

The student will CIC probabilities involving the sample mean using the CLT.

Inference

The student will CIC confidence intervals and PIC (the basic components of) hypothesis tests for one and two samples.

Data collection/experiment design

The student will identify and evaluate common sampling techniques and experimental designs including sources of bias.